```
RCS file: /s6/cvsroot/euterpe/BOM, v
Working file: BOM
head: 5.105
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 1940; selected revisions: 23
description:
top level BOM
revision 3.828
date: 1995/06/08 19:44:20; author: jeffm; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel
     wbck debug.sig
Added fillstate to trace.
revision 3.827
date: 1995/06/08 17:47:54; author: jeffm; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel
     uu debug.srl
Fix signal name, again
______
revision 3.826
date: 1995/06/08 17:27:00; author: jeffm; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel
     uu debug.srl
Fix signal names
_____
revision 3.825
date: 1995/06/08 13:46:38; author: lisar; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel
     template
m13 - > m16
revision 3.824
date: 1995/06/07 23:17:20; author: jeffm; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel/hermes
Fix hermestest.
_____
revision 3.823
date: 1995/06/07 22:40:41; author: mws; state: Exp; lines: +2 -2
Release Target: euterpe/verilog/bsrc
cc/ccrcv.Veqn cc/cc.V cc/cc control blob.pim \
cp/cp.power.tab.top cp/cpl.pim \
euterpe.V (incl UUvldSN128WrtR10 UUvldSN128WrtDR10 name/function change) \
uu/uu.V uu/uu.power.tab.top uu/uu control.pim:
 A cylinder doing an I fill interrupted away so that forward progress became
 active. This allowed another cyl to start a new I miss, which reloaded
  the saved GVA needed to write the original miss's ITag entry. Delays in
```

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the fill writes navigating through NB+CP allowed the fill adrs to change 1st. So change CC to release inprog(p1) not when it sees the last I fill hexlet get stuffed into NB (which was arbitrarily modeled upon the same main pipe point when the DCache/DTag get written directly on D fills), but instead when CP confirms that the ITag write is committed enough to let CC restart. Test cachenasty5 var dr 1 accidentally noticed.

______ revision 3.822 date: 1995/06/07 22:30:35; author: jeffm; state: Exp; lines: +2 -2 Release Target: euterpe/verify/toplevel uu debug.srl Added more signals to uu debug.srl. revision 3.821 date: 1995/06/07 18:56:49; author: jeffm; state: Exp; lines: +2 -2 Release Target: euterpe/verify/toplevel/hermes Fix hermestest. _____ revision 3,820 date: 1995/06/07 17:57:45; author: jeffm; state: Exp; lines: +2 -2 Release Target: euterpe/verify/toplevel uu debug.srl Modernized and added ifetch snake path stuff. _____ revision 3.819 date: 1995/06/07 16:44:21; author: jeffm; state: Exp; lines: +2 -2 Release Target: euterpe/verify/toplevel lva debug.sig For debugging lva calculations. ----revision 3.818 date: 1995/06/07 05:29:55; author: lisar; state: Exp; lines: +2 -2 Release Target: euterpe/verify/toplevel template More variations revision 3.817 date: 1995/06/06 20:18:01; author: lisar; state: Exp; lines: +2 -2 Release Target: euterpe/verify/nasty Delete extra space causing missing seperator _____ revision 3.816 date: 1995/06/06 20:05:36; author: lisar; state: Exp; lines: +2 -2 Release Target: euterpe/verify/nasty Build variations with differnet octlet 10 dram values revision 3.815 date: 1995/06/06 19:47:42; author: lisar; state: Exp; lines: +2 -2 Release Target: euterpe/verify/include

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```
Added set_ratio_m1 and set_ratio_m1_6 macros
revision 3.814
date: 1995/06/06 18:02:50; author: woody; state: Exp; lines: +2 -2
Release Target: euterpe/verilog/bsrc/hc
     hc0 control.pim
Move usnapc2/u0 to avoid a toplevel collision
revision 3.813
date: 1995/06/06 16:00:37; author: jeffm; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel/hermes
Fix hermestest.
revision 3.812
date: 1995/06/06 02:27:15; author: mws; state: Exp; lines: +2 -2
Release Target: euterpe/verilog/bsrc
cc/cclatedirty. Veqn cc/cc. V cc/cc control blob.pim:
 On latedirty cases that CC calls "ahd" (store issues at later time than
  instr causing D miss), the start vldStr were correctly pipelined to R16
  and R18 for cclatedirty. Veqn to examine but not the match result which
 was staged to R14 only then used in R16 and R18. This caused matches
 from the cyl number 2 higher for the -2 case and 4 higher for the -4 case
  to be used instead of our own cylinder. Test hermnasty 1 accidentally
 noticed. Fix in cc.V 1.83 was probably never right but just perturbed
 cachesynchnasty2 var a 1 enough to make it pass.
cc/ccrcv. Veqn: Add some comments explaining why CC releases when it does.
 Also note that ccrcv. Veqn 51.7 logmsg should have noted that
  it was making the I inprog release 10 ticks later as it already was in
  the D case to prevent CC from absorbing a new D miss too quickly after
  an I miss finished. The new D miss would retrigger the still piping
  later vldFillR21 causing the fillcount to get out of synch with the rest
  of CC, allowing CC to think it was done 1 hexlet early on later fills
  and clobber registers holding the write data for the 4th hexlet fill.
  Test exintbash var a 1 accidentally noticed.
euterpe.V: Change net names from
 HZtCdNdxHzrdS9S12L5L6 HZtCdNdxHzrdS5S8L5L6 HZtCdNdxHzrdS1S4L9L10 to
 HZtCdNdxHzrdS11S14L5L6 HZtCdNdxHzrdS7S10L5L6 HZtCdNdxHzrdS5S8L9L10
 to reflect actual staging. At least the wbck.srl will have to be updated
 to match.
revision 3.811
date: 1995/06/05 22:35:17; author: jeffm; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel/hermes
Fix hermestest.
______
revision 3.810
date: 1995/06/05 21:40:56; author: mws; state: Exp; lines: +2 -2
Release Target: euterpe/verilog/bsrc
     Makefile
     euterpe.V
Makefile: Revert wrapchsim & ch euterpe wrap.v back to non-real regfile & gtlb.
```

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euterpe.V: Change net name CDdInS17S20 to CDdInS16S19 to reflect actual

```
staging. At least the dbuf.srl will have to be updated to match.
revision 3.809
date: 1995/06/05 19:12:46; author: doi; state: Exp; lines: +2 -2
Release Target: euterpe/verify/tools/regdepend
enable dram and add support for qcopyswap11i
revision 3.808
date: 1995/06/05 17:06:01; author: jeffm; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel/hermes
Fix hermestest.
_____
revision 3.807
date: 1995/06/04 05:22:18; author: lisar; state: Exp; lines: +2 -2
Release Target: euterpe/verify/include
Release new dram macros.
revision 3.806
date: 1995/06/03 14:52:39; author: woody; state: Exp; lines: +2 -2
Release Target: euterpe/verilog/bsrc
Changes to euterpe.V and gt.V to accomadate for the 2 added vref signals to the
gtlb. gt placement updated. The 2 vref generators are placed in the row immed
below the gtlb with one on each side of the clockspar in the middle of the
qtlb.
Requires proteus/ged/gt/BOM 10.0 and proteus/verilog/src/gt/BOM 8.0 to run
verilog.
5woody 0 fabbed with both the behavioral model and the real gtlb.
______
RCS file: /s6/cvsroot/euterpe/ged/rf/nba16x64/spice.1.3,v
Working file: ged/rf/nba16x64/spice.1.3
head: 1.2
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 2; selected revisions: 1
description:
revision 1.2
date: 1995/06/04 01:26:19; author: ong; state: Exp; lines: +1339 -1339
Replaced output with full swing FF
______
RCS file: /s6/cvsroot/euterpe/ged/rf/nba16x64/spice.1.4,v
Working file: ged/rf/nba16x64/spice.1.4
head: 1.3
branch:
locks: strict
access list:
keyword substitution: kv
```

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```
total revisions: 3; selected revisions: 1
description:
revision 1.3
date: 1995/06/04 01:26:30; author: ong; state: Exp; lines: +448 -448
Replaced output with full swing FF
______
RCS file: /s6/cvsroot/euterpe/ged/rf/nba16x64/spice cn.1.3,v
Working file: ged/rf/nba16x64/spice cn.1.3
head: 1.2
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 2; selected revisions: 1
description:
_____
revision 1.2
date: 1995/06/04 01:26:33; author: ong; state: Exp; lines: +501 -501
Replaced output with full swing FF
______
RCS file: /s6/cvsroot/euterpe/ged/rf/nba16x64/spice cn.1.4,v
Working file: ged/rf/nba16x64/spice cn.1.4
head: 1.3
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 3; selected revisions: 1
description:
revision 1.3
date: 1995/06/04 01:26:36; author: ong; state: Exp; lines: +168 -168
Replaced output with full swing FF
______
RCS file: /s6/cvsroot/euterpe/ged/rf/nbd32x64/spice.1.3,v
Working file: ged/rf/nbd32x64/spice.1.3
head: 1.2
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 2; selected revisions: 1
description:
revision 1.2
date: 1995/06/04 01:27:17; author: ong; state: Exp; lines: +1340 -1336
Replaced half swing output FF with full swing
______
RCS file: /s6/cvsroot/euterpe/ged/rf/nbd32x64/spice.1.4,v
Working file: ged/rf/nbd32x64/spice.1.4
head: 1.3
branch:
```

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```
locks: strict
access list:
keyword substitution: kv
total revisions: 3; selected revisions: 1
description:
revision 1.3
date: 1995/06/04 01:27:27; author: ong; state: Exp; lines: +412 -412
Replaced half swing output FF with full swing
______
RCS file: /s6/cvsroot/euterpe/ged/rf/nbd32x64/spice cn.1.3,v
Working file: ged/rf/nbd32x64/spice cn.1.3
head: 1.2
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 2; selected revisions: 1
description:
-----
revision 1.2
date: 1995/06/04 01:27:31; author: ong; state: Exp; lines: +501 -500
Replaced half swing output FF with full swing
______
RCS file: /s6/cvsroot/euterpe/ged/rf/nbd32x64/spice cn.1.4,v
Working file: ged/rf/nbd32x64/spice cn.1.4
head: 1.3
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 3; selected revisions: 1
description:
_____
revision 1.3
date: 1995/06/04 01:27:34; author: ong; state: Exp; lines: +163 -163
Replaced half swing output FF with full swing
______
RCS file: /s6/cvsroot/euterpe/verify/BOM,v
Working file: verify/BOM
head: 12.34
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 404; selected revisions: 18
description:
revision 4.173
date: 1995/06/08 19:43:54; author: jeffm; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel
     wbck debug.sig
```

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Added fillstate to trace.

```
revision 4.172
date: 1995/06/08 17:47:31; author: jeffm; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel
    uu debug.srl
Fix signal name, again
revision 4.171
date: 1995/06/08 17:26:36; author: jeffm; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel
     uu debug.srl
Fix signal names
_____
revision 4.170
date: 1995/06/08 13:46:19; author: lisar; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel
     template
m13 - > m16
-----
revision 4.169
date: 1995/06/07 23:17:02; author: jeffm; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel/hermes
Fix hermestest.
_____
revision 4.168
date: 1995/06/07 22:30:16; author: jeffm; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel
    uu debug.srl
Added more signals to uu debug.srl.
-----
revision 4.167
date: 1995/06/07 18:56:27; author: jeffm; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel/hermes
Fix hermestest.
revision 4.166
date: 1995/06/07 17:57:16; author: jeffm; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel
    uu debug.srl
Modernized and added ifetch snake path stuff.
revision 4.165
date: 1995/06/07 16:44:00; author: jeffm; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel
     lva debug.sig
For debugging lva calculations.
_____
revision 4.164
date: 1995/06/07 05:29:40; author: lisar; state: Exp; lines: +2 -2
```

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Release Target: euterpe/verify/toplevel template More variations ______ revision 4.163 date: 1995/06/06 20:17:45; author: lisar; state: Exp; lines: +2 -2 Release Target: euterpe/verify/nasty Delete extra space causing missing seperator revision 4.162 date: 1995/06/06 20:05:19; author: lisar; state: Exp; lines: +2 -2 Release Target: euterpe/verify/nasty Build variations with differnet octlet 10 dram values revision 4.161 date: 1995/06/06 19:47:26; author: lisar; state: Exp; lines: +2 -2 Release Target: euterpe/verify/include Added set_ratio_m1 and set_ratio_m1_6 macros revision 4.160 date: 1995/06/06 16:00:14; author: jeffm; state: Exp; lines: +2 -2 Release Target: euterpe/verify/toplevel/hermes Fix hermestest. _____ revision 4.159 date: 1995/06/05 22:34:46; author: jeffm; state: Exp; lines: +2 -2 Release Target: euterpe/verify/toplevel/hermes Fix hermestest. _____ revision 4.158 date: 1995/06/05 19:12:18; author: doi; state: Exp; lines: +2 -2 Release Target: euterpe/verify/tools/regdepend enable dram and add support for gcopyswap11i revision 4.157 date: 1995/06/05 17:05:42; author: jeffm; state: Exp; lines: +2 -2 Release Target: euterpe/verify/toplevel/hermes Fix hermestest. revision 4.156 date: 1995/06/04 05:21:57; author: lisar; state: Exp; lines: +2 -2 Release Target: euterpe/verify/include Release new dram macros. ______ RCS file: /s6/cvsroot/euterpe/verify/include/BOM, v Working file: verify/include/BOM head: 36.0

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```
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 70; selected revisions: 4
description:
releasebom adding BOM
_____
revision 33.0
date: 1995/06/06 19:47:16; author: lisar; state: Exp; lines: +1 -1
Release Target: euterpe/verify/include
Added set ratio m1 and set ratio m1 6 macros
_____
revision 32.1
date: 1995/06/06 19:47:10; author: lisar; state: Exp; lines: +2 -2
releasebom: File needs to be up-to-date to use commit -r
_____
revision 32.0
date: 1995/06/04 05:21:46; author: lisar; state: Exp; lines: +1 -1
Release Target: euterpe/verify/include
Release new dram macros.
revision 31.1
date: 1995/06/04 05:21:38; author: lisar; state: Exp; lines: +2 -2
releasebom: File needs to be up-to-date to use commit -r
______
RCS file: /s6/cvsroot/euterpe/verify/include/cerberus.h,v
Working file: verify/include/cerberus.h
head: 10.24
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 24; selected revisions: 2
description:
revision 10.19
date: 1995/06/06 19:46:50; author: lisar; state: Exp; lines: +38 -1
Added set ratio m1 and set ratio m1 6 macros
_____
revision 10.18
date: 1995/06/04 05:21:02; author: lisar; state: Exp; lines: +51 -1
Added macros clobber refresh mult, increase refresh mult and set m1 3.
_____
RCS file: /s6/cvsroot/euterpe/verify/nasty/BOM,v
Working file: verify/nasty/BOM
head: 19.0
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 36; selected revisions: 4
description:
```

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```
releasebom adding BOM
revision 16.0
date: 1995/06/06 20:17:34; author: lisar; state: Exp; lines: +1 -1
Release Target: euterpe/verify/nasty
Delete extra space causing missing seperator
_____
revision 15.1
date: 1995/06/06 20:17:28; author: lisar; state: Exp; lines: +2 -2
releasebom: File needs to be up-to-date to use commit -r
revision 15.0
date: 1995/06/06 20:05:09; author: lisar; state: Exp; lines: +1 -1
Release Target: euterpe/verify/nasty
Build variations with differnet octlet 10 dram values
revision 14.1
date: 1995/06/06 20:05:03; author: lisar; state: Exp; lines: +5 -5
releasebom: File needs to be up-to-date to use commit -r
_____
RCS file: /s6/cvsroot/euterpe/verify/nasty/Makefile,v
Working file: verify/nasty/Makefile
head: 1.14
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 14; selected revisions: 3
description:
revision 1.11
date: 1995/06/06 20:16:26; author: lisar; state: Exp; lines: +2 -2
Delete extrac space cousing missing seperator
______
revision 1.10
date: 1995/06/06 19:46:01; author: lisar; state: Exp; lines: +69 -54
Added variations that turn on refresh, increash the refresh rate and
decrease m1 ratio.
revision 1.9
date: 1995/06/04 05:19:34; author: lisar; state: Exp; lines: +152 -3
Added varations with refresh, fast refresh and fast dram interface.
______
RCS file: /s6/cvsroot/euterpe/verify/nasty/cachenasty5.S,v
Working file: verify/nasty/cachenasty5.S
head: 1.7
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 7; selected revisions: 2
description:
_____
```

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```
revision 1.5
date: 1995/06/06 19:46:03; author: lisar; state: Exp; lines: +3 -3
Added variations that turn on refresh, increash the refresh rate and
decrease m1 ratio.
revision 1.4
date: 1995/06/04 05:19:36; author: lisar; state: Exp; lines: +10 -1
Added varations with refresh, fast refresh and fast dram interface.
______
RCS file: /s6/cvsroot/euterpe/verify/nasty/cachesynchnasty2.S,v
Working file: verify/nasty/cachesynchnasty2.S
head: 1.7
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 7; selected revisions: 2
description:
_____
revision 1.6
date: 1995/06/06 19:46:05; author: lisar; state: Exp; lines: +3 -3
Added variations that turn on refresh, increash the refresh rate and
decrease m1 ratio.
_____
revision 1.5
date: 1995/06/04 05:19:37; author: lisar; state: Exp; lines: +10 -1
Added varations with refresh, fast refresh and fast dram interface.
______
RCS file: /s6/cvsroot/euterpe/verify/nasty/exintbash.S,v
Working file: verify/nasty/exintbash.S
head: 3.7
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 7; selected revisions: 1
description:
revision 3.4
date: 1995/06/06 19:46:06; author: lisar; state: Exp; lines: +10 -1
Added variations that turn on refresh, increash the refresh rate and
decrease m1 ratio.
_____
RCS file: /s6/cvsroot/euterpe/verify/obj/processor/inst/Makefile,v
Working file: verify/obj/processor/inst/Makefile
head: 1.182
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 182; selected revisions: 1
description:
_____
revision 1.166
```

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```
date: 1995/06/05 06:21:38; author: lisar; state: Exp; lines: +55 -4
Turn on refresh and increase timing.
______
RCS file: /s6/cvsroot/euterpe/verify/obj/system/nasty/Makefile,v
Working file: verify/obj/system/nasty/Makefile
head: 1.16
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 16; selected revisions: 3
description:
revision 1.11
date: 1995/06/06 20:16:26; author: lisar; state: Exp; lines: +2 -2
Delete extrac space cousing missing seperator
_____
revision 1.10
date: 1995/06/06 19:46:01; author: lisar; state: Exp; lines: +69 -54
Added variations that turn on refresh, increash the refresh rate and
decrease m1 ratio.
revision 1.9
date: 1995/06/04 05:19:34; author: lisar; state: Exp; lines: +152 -3
Added varations with refresh, fast refresh and fast dram interface.
_____
RCS file: /s6/cvsroot/euterpe/verify/perf/Makefile,v
Working file: verify/perf/Makefile
head: 1.10
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 10; selected revisions: 1
description:
_____
revision 1.4
date: 1995/06/07 22:27:03; author: lisar; state: Exp; lines: +12 -2
Added new tests
RCS file: /s6/cvsroot/euterpe/verify/perf/bgate perf.S,v
Working file: verify/perf/bgate perf.S
head: 3.2
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 2; selected revisions: 1
description:
_____
revision 3.1
date: 1995/06/06 22:35:45; author: claseman; state: Exp;
initial revision
```

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```
RCS file: /s6/cvsroot/euterpe/verify/perf/bgatei perf.S,v
Working file: verify/perf/bgatei perf.S
head: 3.2
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 2; selected revisions: 1
description:
revision 3.1
date: 1995/06/06 22:35:48; author: claseman; state: Exp;
initial revision
_____
RCS file: /s6/cvsroot/euterpe/verify/perf/bi perf.S,v
Working file: verify/perf/bi perf.S
head: 3.2
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 2; selected revisions: 1
description:
_____
revision 3.1
date: 1995/06/06 22:35:49; author: claseman; state: Exp;
initial revision
______
RCS file: /s6/cvsroot/euterpe/verify/perf/gcompress16 perf.S,v
Working file: verify/perf/gcompress16 perf.S
head: 3.3
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 3; selected revisions: 1
description:
revision 3.1
date: 1995/06/08 22:16:37; author: claseman; state: Exp;
initial revision
_____
RCS file: /s6/cvsroot/euterpe/verify/perf/gcompress64 perf.S,v
Working file: verify/perf/gcompress64 perf.S
head: 3.3
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 3; selected revisions: 1
description:
revision 3.1
```

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```
date: 1995/06/08 22:16:40; author: claseman; state: Exp;
initial revision
RCS file: /s6/cvsroot/euterpe/verify/perf/gmdepi1 perf.S,v
Working file: verify/perf/gmdepi1 perf.S
head: 3.2
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 2; selected revisions: 1
description:
revision 3.1
date: 1995/06/08 22:16:42; author: claseman; state: Exp;
initial revision
______
RCS file: /s6/cvsroot/euterpe/verify/perf/gmdepi64 perf.S,v
Working file: verify/perf/gmdepi64 perf.S
head: 3.2
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 2; selected revisions: 1
description:
_____
revision 3.1
date: 1995/06/08 22:16:45; author: claseman; state: Exp;
initial revision
______
RCS file: /s6/cvsroot/euterpe/verify/perf/gselect8 perf.S,v
Working file: verify/perf/gselect8 perf.S
head: 3.2
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 2; selected revisions: 1
description:
revision 3.1
date: 1995/06/08 22:16:47; author: claseman; state: Exp;
initial revision
______
RCS file: /s6/cvsroot/euterpe/verify/perf/gsete64 perf.S,v
Working file: verify/perf/gsete64 perf.S
head: 3.2
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 2; selected revisions: 1
```

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```
description:
revision 3.1
date: 1995/06/06 22:35:51; author: claseman; state: Exp;
initial revision
______
RCS file: /s6/cvsroot/euterpe/verify/perf/gtranspose8mux perf.S,v
Working file: verify/perf/gtranspose8mux perf.S
head: 3.2
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 2; selected revisions: 1
description:
_____
revision 3.1
date: 1995/06/08 22:16:49; author: claseman; state: Exp;
initial revision
______
RCS file: /s6/cvsroot/euterpe/verify/perf/lu32li perf.S,v
Working file: verify/perf/lu32li perf.S
head: 3.2
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 2; selected revisions: 1
description:
revision 3.1
date: 1995/06/08 22:16:51; author: claseman; state: Exp;
initial revision
______
RCS file: /s6/cvsroot/euterpe/verify/perf/lu8i perf.S,v
Working file: verify/perf/lu8i perf.S
head: 3.2
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 2; selected revisions: 1
description:
revision 3.1
date: 1995/06/08 22:16:53; author: claseman; state: Exp;
initial revision
                   ______
RCS file: /s6/cvsroot/euterpe/verify/perf/mbnez_perf.S,v
Working file: verify/perf/mbnez perf.S
head: 3.2
branch:
locks: strict
```

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```
access list:
keyword substitution: kv
total revisions: 2; selected revisions: 1
description:
revision 3.1
date: 1995/06/08 22:16:55; author: claseman; state: Exp;
initial revision
______
RCS file: /s6/cvsroot/euterpe/verify/perf/saas64la perf.S,v
Working file: verify/perf/saas64la perf.S
head: 3.2
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 2; selected revisions: 1
description:
-----
revision 3.1
date: 1995/06/06 22:35:53; author: claseman; state: Exp;
initial revision
______
RCS file: /s6/cvsroot/euterpe/verify/perf/smas64la perf.S,v
Working file: verify/perf/smas64la perf.S
head: 3.2
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 2; selected revisions: 1
description:
_____
revision 3.1
date: 1995/06/06 22:35:55; author: claseman; state: Exp;
initial revision
______
RCS file: /s6/cvsroot/euterpe/verify/random/Makefile,v
Working file: verify/random/Makefile
head: 1.20
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 20; selected revisions: 3
description:
revision 1.18
date: 1995/06/08 16:32:10; author: dit00; state: Exp; lines: +5 -5
Removed incorrect \'s in stgen and stbash
revision 1.17
date: 1995/06/07 23:10:14; author: lisar; state: Exp; lines: +30 -9
Added stbash rules
```

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```
revision 1.16
date: 1995/06/05 18:16:37; author: dit00; state: Exp; lines: +3 -11
*** empty log message ***
_____
RCS file: /s6/cvsroot/euterpe/verify/random/regdepend r2279.S,v
Working file: verify/random/regdepend r2279.S
head: 3.2
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 2; selected revisions: 1
description:
revision 3.1
date: 1995/06/05 18:12:15; author: dit00; state: Exp;
Test Ran OK.]
______
RCS file: /s6/cvsroot/euterpe/verify/random/regdepend r2476.S,v
Working file: verify/random/regdepend r2476.S
head: 3.2
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 2; selected revisions: 1
description:
revision 3.1
date: 1995/06/05 18:18:01; author: dit00; state: Exp;
*** empty log message ***
______
RCS file: /s6/cvsroot/euterpe/verify/random/regdepend r2493.S,v
Working file: verify/random/regdepend r2493.S
head: 3.2
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 2; selected revisions: 1
description:
revision 3.1
date: 1995/06/06 14:46:37; author: dit00; state: Exp;
Test Ran OK
______
RCS file: /s6/cvsroot/euterpe/verify/random/regdepend r2688.S,v
Working file: verify/random/regdepend r2688.S
head: 3.2
branch:
locks: strict
access list:
```

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```
keyword substitution: kv
total revisions: 2; selected revisions: 1
description:
revision 3.1
date: 1995/06/05 18:18:15; author: dit00; state: Exp;
*** empty log message ***
_______
RCS file: /s6/cvsroot/euterpe/verify/random/regdepend r2695.S,v
Working file: verify/random/regdepend r2695.S
head: 3.2
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 2; selected revisions: 1
description:
_____
revision 3.1
date: 1995/06/06 14:47:01; author: dit00; state: Exp;
Test Ran OK
______
RCS file: /s6/cvsroot/euterpe/verify/random/regdepend r2895.S,v
Working file: verify/random/regdepend r2895.S
head: 3.2
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 2;
                 selected revisions: 1
description:
revision 3.1
date: 1995/06/05 18:18:19; author: dit00; state: Exp;
*** empty log message ***
______
RCS file: /s6/cvsroot/euterpe/verify/random/regdepend r3094.S,v
Working file: verify/random/regdepend r3094.S
head: 3.2
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 2; selected revisions: 1
description:
______
revision 3.1
date: 1995/06/05 18:18:23; author: dit00; state: Exp;
*** empty log message ***
______
RCS file: /s6/cvsroot/euterpe/verify/random/regdepend r3362.S,v
Working file: verify/random/regdepend r3362.S
head: 3.2
```

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```
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 2; selected revisions: 1
description:
revision 3.1
date: 1995/06/07 14:22:23; author: dit00; state: Exp;
Test ran ok
______
RCS file: /s6/cvsroot/euterpe/verify/random/status,v
Working file: verify/random/status
head: 2.26
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 26; selected revisions: 4
description:
-----
revision 2.8
date: 1995/06/06 14:47:19; author: dit00; state: Exp; lines: +1 -0
Update status
_____
revision 2.7
date: 1995/06/06 14:20:05; author: dit00; state: Exp; lines: +5 -0
status update
_____
revision 2.6
date: 1995/06/05 18:18:27; author: dit00; state: Exp; lines: +5 -0
Test Ran OK.
revision 2.5
date: 1995/06/05 17:56:03; author: dit00; state: Exp; lines: +7 -0
Update status file
______
RCS file: /s6/cvsroot/euterpe/verify/random/template,v
Working file: verify/random/template
head: 2.33
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 33; selected revisions: 2
description:
_____
revision 2.7
date: 1995/06/06 14:47:39; author: dit00; state: Exp; lines: +4 -5
Update to reflect latest test status
revision 2.6
date: 1995/06/05 18:18:49; author: dit00; state: Exp; lines: +85 -0
Test Ran OK.
______
```

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```
RCS file: /s6/cvsroot/euterpe/verify/tools/BOM,v
Working file: verify/tools/BOM
head: 13.0
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 90; selected revisions: 1
description:
releasebom adding BOM
revision 7.3
date: 1995/06/05 19:12:02; author: doi; state: Exp; lines: +2 -2
Release Target: euterpe/verify/tools/regdepend
enable dram and add support for gcopyswap11i
______
RCS file: /s6/cvsroot/euterpe/verify/tools/regdepend/BOM, v
Working file: verify/tools/regdepend/BOM
head: 26.0
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 50; selected revisions: 2
description:
releasebom adding BOM
-----
revision 24.0
date: 1995/06/05 19:11:48; author: doi; state: Exp; lines: +1 -1
Release Target: euterpe/verify/tools/regdepend
enable dram and add support for qcopyswap11i
_____
revision 23.1
date: 1995/06/05 19:11:38; author: doi; state: Exp; lines: +2 -2
releasebom: File needs to be up-to-date to use commit -r
______
RCS file: /s6/cvsroot/euterpe/verify/tools/regdepend/regdepend.c,v
Working file: verify/tools/regdepend/regdepend.c
head: 1.29
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 29; selected revisions: 1
description:
revision 1.27
date: 1995/06/05 19:11:07; author: doi; state: Exp; lines: +16 -4
enable dram and add support for gcopyswap11i
______
```

RCS file: /s6/cvsroot/euterpe/verify/toplevel/BOM,v

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```
Working file: verify/toplevel/BOM
head: 44.1
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 132; selected revisions: 13
description:
releasebom adding BOM
_____
revision 39.31
date: 1995/06/08 19:43:38; author: jeffm; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel
     wbck debug.sig
Added fillstate to trace.
revision 39.30
date: 1995/06/08 17:47:19; author: jeffm; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel
     uu debug.srl
Fix signal name, again
______
revision 39.29
date: 1995/06/08 17:26:24; author: jeffm; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel
    uu debug.srl
Fix signal names
-----
revision 39.28
date: 1995/06/08 13:46:09; author: lisar; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel
     template
m13 - > m16
revision 39.27
date: 1995/06/07 23:16:51; author: jeffm; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel/hermes
Fix hermestest.
_____
revision 39.26
date: 1995/06/07 22:29:59; author: jeffm; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel
     uu debug.srl
Added more signals to uu debug.srl.
revision 39,25
date: 1995/06/07 18:56:15; author: jeffm; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel/hermes
Fix hermestest.
_____
```

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```
revision 39.24
date: 1995/06/07 17:57:01; author: jeffm; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel
     uu debuq.srl
Modernized and added ifetch snake path stuff.
revision 39,23
date: 1995/06/07 16:43:49; author: jeffm; state: Exp; lines: +5 -1
Release Target: euterpe/verify/toplevel
     lva debug.sig
For debugging lva calculations.
revision 39,22
date: 1995/06/07 05:29:31; author: lisar; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel
     template
More variations
revision 39.21
date: 1995/06/06 16:00:00; author: jeffm; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel/hermes
Fix hermestest.
_____
revision 39.20
date: 1995/06/05 22:34:27; author: jeffm; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel/hermes
Fix hermestest.
_____
revision 39.19
date: 1995/06/05 17:05:31; author: jeffm; state: Exp; lines: +2 -2
Release Target: euterpe/verify/toplevel/hermes
Fix hermestest.
RCS file: /s6/cvsroot/euterpe/verify/toplevel/Makefile,v
Working file: verify/toplevel/Makefile
head: 1.185
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 185; selected revisions: 1
description:
revision 1.166
date: 1995/06/05 06:21:38; author: lisar; state: Exp; lines: +55 -4
Turn on refresh and increase timing.
______
RCS file: /s6/cvsroot/euterpe/verify/toplevel/dbuf debug.sig,v
Working file: verify/toplevel/dbuf debug.sig
```

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```
head: 39.1
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 1; selected revisions: 1
description:
_____
revision 39.1
date: 1995/06/04 22:19:12; author: lisar; state: Exp;
Used in exintbash_var_a_1 debug
_____
                          _____
RCS file: /s6/cvsroot/euterpe/verify/toplevel/ibufhz debug.srl,v
Working file: verify/toplevel/ibufhz_debug.srl
head: 39.2
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 2; selected revisions: 1
description:
revision 39.1
date: 1995/06/06 22:19:59; author: lisar; state: Exp;
Ibuffer hazard
______
RCS file: /s6/cvsroot/euterpe/verify/toplevel/latedirty.S,v
Working file: verify/toplevel/latedirty.S
head: 37.4
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 4; selected revisions: 2
description:
revision 37.4
date: 1995/06/07 18:36:59; author: jeffm; state: Exp; lines: +49 -5
Due to a bug in the looping algo, was only doing 1/4th of the cases.
Per mws, make the cylinders that are not involved in the latedirty case
do ecopyi's that will generate an index in the pipe that the involved
cylinders do not use.
-----
revision 37.3
date: 1995/06/06 20:38:10; author: jeffm; state: Exp; lines: +21 -3
Fixed the following:
Unique data patterns, so that missing wbcks can be detected.
Set page size to 8K to avoid page crossers in timing sensitive areas.
Make absolutely sure that the clean line is in the cache at the start of
```

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```
RCS file: /s6/cvsroot/euterpe/verify/toplevel/lva debug.sig,v
Working file: verify/toplevel/lva debug.sig
head: 39.2
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 2; selected revisions: 2
description:
revision 39.2
date: 1995/06/07 18:55:30; author: lisar; state: Exp; lines: +0 -1
Deleted /uut/euterpe/RGopbRegBenRQ as not found in design
revision 39.1
date: 1995/06/07 16:43:06; author: jeffm; state: Exp;
For debugging lva calculations.
_______
RCS file: /s6/cvsroot/euterpe/verify/toplevel/store unique.S,v
Working file: verify/toplevel/store unique.S
head: 7.14
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 14; selected revisions: 1
description:
_____
revision 7.13
date: 1995/06/05 06:21:40; author: lisar; state: Exp; lines: +13 -1
Turn on refresh and increase timing.
_____
RCS file: /s6/cvsroot/euterpe/verify/toplevel/template,v
Working file: verify/toplevel/template
head: 1.148
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 148; selected revisions: 3
description:
revision 1.107
date: 1995/06/08 13:44:32; author: lisar; state: Exp; lines: +28 -22
m13 - > m16
revision 1.106
date: 1995/06/07 05:29:05; author: lisar; state: Exp; lines: +20 -19
More variations
revision 1.105
date: 1995/06/05 06:21:45; author: lisar; state: Exp; lines: +123 -55
Turn on refresh and increase timing.
______
```

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```
RCS file: /s6/cvsroot/euterpe/verify/toplevel/uu debug.srl,v
Working file: verify/toplevel/uu debug.srl
head: 5.9
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 9; selected revisions: 4
description:
revision 5.5
date: 1995/06/08 17:46:52; author: jeffm; state: Exp; lines: +2 -2
Fix signal name.
revision 5.4
date: 1995/06/08 17:25:54; author: jeffm; state: Exp; lines: +12 -12
Fix instance name for holduu.
revision 5.3
date: 1995/06/07 22:29:11; author: jeffm; state: Exp; lines: +15 -0
Added ibuf dout pins and we.
revision 5.2
date: 1995/06/07 17:55:54; author: jeffm; state: Exp; lines: +70 -163
Modernized and added ifetch snake path stuff.
______
RCS file: /s6/cvsroot/euterpe/verify/toplevel/wbck debug.sig,v
Working file: verify/toplevel/wbck debug.sig
head: 33.10
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 10; selected revisions: 1
description:
revision 33.9
date: 1995/06/08 19:43:03; author: jeffm; state: Exp; lines: +2 -1
Added fillstate to trace.
______
RCS file: /s6/cvsroot/euterpe/verify/toplevel/hermes/BOM,v
Working file: verify/toplevel/hermes/BOM
head: 12.0
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 22; selected revisions: 10
description:
releasebom adding BOM
revision 9.0
date: 1995/06/07 23:16:37; author: jeffm; state: Exp; lines: +1 -1
Release Target: euterpe/verify/toplevel/hermes
```

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```
Fix hermestest.
_____
revision 8.1
date: 1995/06/07 23:16:30; author: jeffm; state: Exp; lines: +2 -2
releasebom: File needs to be up-to-date to use commit -r
revision 8.0
date: 1995/06/07 18:56:00; author: jeffm; state: Exp; lines: +1 -1
Release Target: euterpe/verify/toplevel/hermes
Fix hermestest.
revision 7.1
date: 1995/06/07 18:55:50; author: jeffm; state: Exp; lines: +2 -2
releasebom: File needs to be up-to-date to use commit -r
_____
revision 7.0
date: 1995/06/06 15:59:44; author: jeffm; state: Exp; lines: +1 -1
Release Target: euterpe/verify/toplevel/hermes
Fix hermestest.
revision 6.1
date: 1995/06/06 15:59:36; author: jeffm; state: Exp; lines: +2 -2
releasebom: File needs to be up-to-date to use commit -r
_____
revision 6.0
date: 1995/06/05 22:34:06; author: jeffm; state: Exp; lines: +1 -1
Release Target: euterpe/verify/toplevel/hermes
Fix hermestest.
_____
revision 5.1
date: 1995/06/05 22:33:49; author: jeffm; state: Exp; lines: +2 -2
releasebom: File needs to be up-to-date to use commit -r
______
revision 5.0
date: 1995/06/05 17:05:21; author: jeffm; state: Exp; lines: +1 -1
Release Target: euterpe/verify/toplevel/hermes
Fix hermestest.
   ______
revision 4.1
date: 1995/06/05 17:05:14; author: jeffm; state: Exp; lines: +2 -2
releasebom: File needs to be up-to-date to use commit -r
______
RCS file: /s6/cvsroot/euterpe/verify/toplevel/hermes/hermestest.S,v
Working file: verify/toplevel/hermes/hermestest.S
head: 1.8
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 8; selected revisions: 5
description:
```

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```
revision 1.6
date: 1995/06/07 23:15:43; author: jeffm; state: Exp; lines: +8 -5
Not initializing enough itag entries.
revision 1.5
date: 1995/06/07 18:54:49; author: jeffm; state: Exp; lines: +11 -11
Raise test case priority to avoid 1tlb misses.
revision 1.4
date: 1995/06/06 15:58:27; author: jeffm; state: Exp; lines: +2 -2
Fixed error in gtlb initialization.
revision 1.3
date: 1995/06/05 22:31:46; author: jeffm; state: Exp; lines: +3 -1
Dtag init loop was never-ending - got ex11.
_____
revision 1.2
date: 1995/06/05 17:04:02; author: jeffm; state: Exp; lines: +2 -2
Fixed expected offchip addition result to be 0x14dc.
______
RCS file: /s6/cvsroot/euterpe/verilog/BOM, v
Working file: verilog/BOM
head: 6.9
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 1390; selected revisions: 5
description:
top level verilog BOM
_____
revision 3.619
date: 1995/06/07 22:40:22; author: mws; state: Exp; lines: +2 -2
Release Target: euterpe/verilog/bsrc
cc/ccrcv. Veqn cc/cc. V cc/cc control blob.pim \
cp/cp.power.tab.top cp/cpl.pim \
euterpe.V (incl UUvldSN128WrtR10 UUvldSN128WrtDR10 name/function change) \
uu/uu.V uu/uu.power.tab.top uu/uu control.pim:
 A cylinder doing an I fill interrupted away so that forward progress became
  active. This allowed another cyl to start a new I miss, which reloaded
  the saved GVA needed to write the original miss's ITag entry. Delays in
  the fill writes navigating through NB+CP allowed the fill adrs to change 1st.
 So change CC to release inprog(p1) not when it sees the last I fill hexlet get
 stuffed into NB (which was arbitrarily modeled upon the same main pipe point
 when the DCache/DTag get written directly on D fills), but instead when CP
 confirms that the ITag write is committed enough to let CC restart.
 Test cachenasty5 var dr 1 accidentally noticed.
revision 3.618
date: 1995/06/06 18:02:26; author: woody; state: Exp; lines: +2 -2
Release Target: euterpe/verilog/bsrc/hc
     hc0 control.pim
Move usnapc2/u0 to avoid a toplevel collision
```

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revision 3.617

date: 1995/06/06 02:26:58; author: mws; state: Exp; lines: +2 -2

Release Target: euterpe/verilog/bsrc

cc/cclatedirty.Veqn cc/cc.V cc/cc_control_blob.pim:

On latedirty cases that CC calls "ahd" (store issues at later time than instr causing D miss), the start vldStr were correctly pipelined to R16 and R18 for cclatedirty. Veqn to examine but not the match result which was staged to R14 only then used in R16 and R18. This caused matches from the cyl number 2 higher for the -2 case and 4 higher for the -4 case to be used instead of our own cylinder. Test hermnasty 1 accidentally noticed. Fix in cc.V 1.83 was probably never right but just perturbed cachesynchnasty2 var a 1 enough to make it pass.

cc/ccrcv.Veqn: Add some comments explaining why CC releases when it does. Also note that ccrcv.Veqn 51.7 logmsg should have noted that it was making the I inprog release 10 ticks later as it already was in the D case to prevent CC from absorbing a new D miss too quickly after an I miss finished. The new D miss would retrigger the still piping later vldFillR21 causing the fillcount to get out of synch with the rest of CC, allowing CC to think it was done 1 hexlet early on later fills and clobber registers holding the write data for the 4th hexlet fill. Test exintbash_var_a_1 accidentally noticed.

euterpe.V: Change net names from

HZtCdNdxHzrdS9S12L5L6 HZtCdNdxHzrdS5S8L5L6 HZtCdNdxHzrdS1S4L9L10 to HZtCdNdxHzrdS11S14L5L6 HZtCdNdxHzrdS7S10L5L6 HZtCdNdxHzrdS5S8L9L10 to reflect actual staging. At least the wbck.srl will have to be updated to match.

revision 3.616

date: 1995/06/05 21:40:33; author: mws; state: Exp; lines: +2 -2

Release Target: euterpe/verilog/bsrc

Makefile euterpe.V

Makefile: Revert wrapchsim & ch_euterpe_wrap.v back to non-real regfile & gtlb.

euterpe.V: Change net name CDdInS17S20 to CDdInS16S19 to reflect actual staging. At least the dbuf.srl will have to be updated to match.

revision 3.615

date: 1995/06/03 14:52:24; author: woody; state: Exp; lines: +2 -2

Release Target: euterpe/verilog/bsrc

Changes to euterpe.V and gt.V to accomadate for the 2 added vref signals to the gtlb. gt placement updated. The 2 vref generators are placed in the row immed below the gtlb with one on each side of the clockspar in the middle of the gtlb.

Requires proteus/ged/gt/BOM 10.0 and proteus/verilog/src/gt/BOM 8.0 to run verilog.

5woody_0 fabbed with both the behavioral model and the real gtlb.

RCS file: /s6/cvsroot/euterpe/verilog/bsrc/BOM,v

Working file: verilog/bsrc/BOM

head: 346.6

```
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 1737; selected revisions: 8
description:
revision 318.0
date: 1995/06/07 22:40:01; author: mws; state: Exp; lines: +1 -1
Release Target: euterpe/verilog/bsrc
cc/ccrcv.Veqn cc/cc.V cc/cc control blob.pim \
cp/cp.power.tab.top cp/cpl.pim \
euterpe.V (incl UUvldSN128WrtR10 UUvldSN128WrtDR10 name/function change) \
uu/uu.V uu/uu.power.tab.top uu/uu_control.pim:
 A cylinder doing an I fill interrupted away so that forward progress became
 active. This allowed another cyl to start a new I miss, which reloaded
  the saved GVA needed to write the original miss's ITag entry. Delays in
  the fill writes navigating through NB+CP allowed the fill adrs to change 1st.
 So change CC to release inprog(p1) not when it sees the last I fill hexlet get
 stuffed into NB (which was arbitrarily modeled upon the same main pipe point
 when the DCache/DTag get written directly on D fills), but instead when CP
 confirms that the ITag write is committed enough to let CC restart.
 Test cachenasty5_var_dr_1 accidentally noticed.
revision 317.2
date: 1995/06/07 22:39:47; author: mws; state: Exp; lines: +6 -6
releasebom: File needs to be up-to-date to use commit -r
_____
revision 317.1
date: 1995/06/06 18:02:01; author: woody; state: Exp; lines: +2 -2
Release Target: euterpe/verilog/bsrc/hc
     hc0 control.pim
Move usnapc2/u0 to avoid a toplevel collision
_____
revision 317.0
date: 1995/06/06 02:26:38; author: mws; state: Exp; lines: +1 -1
Release Target: euterpe/verilog/bsrc
cc/cclatedirty.Veqn cc/cc.V cc/cc_control_blob.pim:
 On latedirty cases that CC calls "ahd" (store issues at later time than
  instr causing D miss), the start vldStr were correctly pipelined to R16
 and R18 for cclatedirty. Vegn to examine but not the match result which
 was staged to R14 only then used in R16 and R18. This caused matches
 from the cyl number 2 higher for the -2 case and 4 higher for the -4 case
 to be used instead of our own cylinder. Test hermnasty 1 accidentally
 noticed. Fix in cc.V 1.83 was probably never right but just perturbed
 cachesynchnasty2 var a 1 enough to make it pass.
cc/ccrcv. Veqn: Add some comments explaining why CC releases when it does.
 Also note that ccrcv. Veqn 51.7 logmsg should have noted that
  it was making the I inprog release 10 ticks later as it already was in
  the D case to prevent CC from absorbing a new D miss too quickly after
 an I miss finished. The new D miss would retrigger the still piping
  later vldFillR21 causing the fillcount to get out of synch with the rest
 of CC, allowing CC to think it was done 1 hexlet early on later fills
  and clobber registers holding the write data for the 4th hexlet fill.
```

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```
Test exintbash var a 1 accidentally noticed.
euterpe.V: Change net names from
 HZtCdNdxHzrdS9S12L5L6 HZtCdNdxHzrdS5S8L5L6 HZtCdNdxHzrdS1S4L9L10 to
 HZtCdNdxHzrdS11S14L5L6 HZtCdNdxHzrdS7S10L5L6 HZtCdNdxHzrdS5S8L9L10
 to reflect actual staging. At least the wbck.srl will have to be updated
 to match.
revision 316.2
date: 1995/06/06 02:26:25; author: mws; state: Exp; lines: +3 -3
releasebom: File needs to be up-to-date to use commit -r
revision 316.1
date: 1995/06/05 21:40:08; author: mws; state: Exp; lines: +3 -3
Release Target: euterpe/verilog/bsrc
     Makefile
      euterpe.V
Makefile: Revert wrapchsim & ch euterpe wrap.v back to non-real regfile & gtlb.
euterpe.V: Change net name CDdInS17S20 to CDdInS16S19 to reflect actual staging. At least the dbuf.srl will have to be updated to match.
revision 316.0
date: 1995/06/03 14:52:06; author: woody; state: Exp; lines: +1 -1
Release Target: euterpe/verilog/bsrc
Changes to euterpe.V and \operatorname{gt.V} to accomadate for the 2 added vref signals to the
gtlb. gt placement updated. The 2 vref generators are placed in the row immed
below the gtlb with one on each side of the clockspar in the middle of the
qtlb.
Requires proteus/ged/gt/BOM 10.0 and proteus/verilog/src/gt/BOM 8.0 to run
verilog.
5woody 0 fabbed with both the behavioral model and the real gtlb.
revision 315.1
date: 1995/06/03 14:51:53; author: woody; state: Exp; lines: +4 -4
releasebom: File needs to be up-to-date to use commit -r
______
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/Makefile,v
Working file: verilog/bsrc/Makefile
head: 1.255
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 255; selected revisions: 2
description:
revision 1.247
date: 1995/06/05 21:39:12; author: mws; state: Exp; lines: +11 -9
Makefile: Revert wrapchsim & ch euterpe wrap.v back to non-real regfile & gtlb.
euterpe.V: Change net name CDdInS17S20 to CDdInS16S19 to reflect actual
 staging. At least the dbuf.srl will have to be updated to match.
revision 1.246
```

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```
date: 1995/06/03 14:45:00; author: woody; state: Exp; lines: +3 -3
Changes to euterpe.V and gt.V to accomadate for the 2 added vref signals to the
gtlb. gt placement updated. The 2 vref generators are placed in the row immed
below the gtlb with one on each side of the clockspar in the middle of the
atlb.
Requires proteus/qed/qt/BOM 10.0 and proteus/veriloq/src/qt/BOM 8.0 to run
verilog.
5woody 0 fabbed with both the behavioral model and the real qtlb.
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/chip euterpe-base.nof,v
Working file: verilog/bsrc/chip euterpe-base.nof
head: 307.11
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 11; selected revisions: 1
description:
-----
revision 307.4
date: 1995/06/06 14:21:58; author: tbr; state: Exp; lines: +87762 -87755
from BOM 317 top level placement
______
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/chip euterpe-base.xrf,v
Working file: verilog/bsrc/chip euterpe-base.xrf
head: 307.11
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 11; selected revisions: 1
description:
revision 307.4
date: 1995/06/06 14:25:28; author: tbr; state: Exp; lines: +42858 -42814
from BOM 317 top level placement
______
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/euterpe.V,v
Working file: verilog/bsrc/euterpe.V
head: 6.431
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 431; selected revisions: 4
description:
revision 6.425
date: 1995/06/07 22:28:21; author: mws; state: Exp; lines: +6 -6
cc/ccrcv.Veqn cc/cc.V cc/cc control blob.pim \
cp/cp.power.tab.top cp/cpl.pim \
```

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euterpe.V (incl UUvldSN128WrtR10 UUvldSN128WrtDR10 name/function change) \

```
uu/uu.V uu/uu.power.tab.top uu/uu control.pim:
  A cylinder doing an I fill interrupted away so that forward progress became
  active. This allowed another cyl to start a new I miss, which reloaded
  the saved GVA needed to write the original miss's ITag entry. Delays in
  the fill writes navigating through NB+CP allowed the fill adrs to change 1st.
 So change CC to release inprog(p1) not when it sees the last I fill hexlet get
  stuffed into NB (which was arbitrarily modeled upon the same main pipe point
 when the DCache/DTag get written directly on D fills), but instead when CP
 confirms that the ITag write is committed enough to let CC restart.
 Test cachenasty5 var dr 1 accidentally noticed.
revision 6.424
date: 1995/06/06 02:17:45; author: mws; state: Exp; lines: +12 -12
euterpe.V: Change net names from
 HZtCdNdxHzrdS9S12L5L6 HZtCdNdxHzrdS5S8L5L6 HZtCdNdxHzrdS1S4L9L10 to
 HZtCdNdxHzrdS11S14L5L6 HZtCdNdxHzrdS7S10L5L6 HZtCdNdxHzrdS5S8L9L10
 to reflect actual staging. At least the wbck.srl will have to be updated
  to match.
revision 6.423
date: 1995/06/05 21:39:19; author: mws; state: Exp; lines: +19 -19
Makefile: Revert wrapchsim & ch_euterpe_wrap.v back to non-real regfile & gtlb.
euterpe.V: Change net name CDdInS17S20 to CDdInS16S19 to reflect actual
 staging. At least the dbuf.srl will have to be updated to match.
revision 6.422
date: 1995/06/03 14:45:05; author: woody; state: Exp; lines: +5 -1
Changes to euterpe. V and qt. V to accomadate for the 2 added vref signals to the
gtlb. gt placement updated. The 2 vref generators are placed in the row immed
below the gtlb with one on each side of the clockspar in the middle of the
qtlb.
Requires proteus/ged/gt/BOM 10.0 and proteus/verilog/src/gt/BOM 8.0 to run
verilog.
5woody 0 fabbed with both the behavioral model and the real gtlb.
______
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/cc/BOM,v
Working file: verilog/bsrc/cc/BOM
head: 92.0
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 182; selected revisions: 4
description:
releasebom adding BOM
revision 90.0
date: 1995/06/07 22:30:47; author: mws; state: Exp; lines: +1 -1
Release Target: euterpe/verilog/bsrc
cc/ccrcv.Veqn cc/cc.V cc/cc control blob.pim \
cp/cp.power.tab.top cp/cpl.pim \
euterpe.V (incl UUvldSN128WrtR10 UUvldSN128WrtDR10 name/function change) \
uu/uu.V uu/uu.power.tab.top uu/uu control.pim:
```

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A cylinder doing an I fill interrupted away so that forward progress became active. This allowed another cyl to start a new I miss, which reloaded the saved GVA needed to write the original miss's ITag entry. Delays in the fill writes navigating through NB+CP allowed the fill adrs to change 1st. So change CC to release inprog(p1) not when it sees the last I fill hexlet get stuffed into NB (which was arbitrarily modeled upon the same main pipe point when the DCache/DTag get written directly on D fills), but instead when CP confirms that the ITag write is committed enough to let CC restart. Test cachenasty5 var dr 1 accidentally noticed.

----revision 89.1 date: 1995/06/07 22:30:40; author: mws; state: Exp; lines: +4 -4 releasebom: File needs to be up-to-date to use commit -r revision 89.0 date: 1995/06/06 02:19:25; author: mws; state: Exp; lines: +1 -1 Release Target: euterpe/verilog/bsrc cc/cclatedirty.Veqn cc/cc.V cc/cc_control_blob.pim:
 On latedirty cases that CC calls "ahd" (store issues at later time than instr causing D miss), the start vldStr were correctly pipelined to R16 and R18 for cclatedirty. Veqn to examine but not the match result which was staged to R14 only then used in R16 and R18. This caused matches from the cyl number 2 higher for the -2 case and 4 higher for the -4 case to be used instead of our own cylinder. Test hermnasty 1 accidentally noticed. Fix in cc.V 1.83 was probably never right but just perturbed cachesynchnasty2 var a 1 enough to make it pass. cc/ccrcv. Veqn: Add some comments explaining why CC releases when it does. Also note that ccrcv. Veqn 51.7 logmsq should have noted that it was making the I inprog release 10 ticks later as it already was in the D case to prevent CC from absorbing a new D miss too quickly after an I miss finished. The new D miss would retrigger the still piping later vldFillR21 causing the fillcount to get out of synch with the rest of CC, allowing CC to think it was done 1 hexlet early on later fills and clobber registers holding the write data for the 4th hexlet fill. Test exintbash var a 1 accidentally noticed. euterpe.V: Change net names from HZtCdNdxHzrdS9S12L5L6 HZtCdNdxHzrdS5S8L5L6 HZtCdNdxHzrdS1S4L9L10 to HZtCdNdxHzrdS11S14L5L6 HZtCdNdxHzrdS7S10L5L6 HZtCdNdxHzrdS5S8L9L10 to reflect actual staging. At least the wbck.srl will have to be updated to match. revision 88.1 date: 1995/06/06 02:19:17; author: mws; state: Exp; lines: +5 -5 releasebom: File needs to be up-to-date to use commit -r ______ RCS file: /s6/cvsroot/euterpe/verilog/bsrc/cc/cc.V,v Working file: verilog/bsrc/cc/cc.V head: 1.87 branch: locks: strict access list: keyword substitution: kv total revisions: 87; selected revisions: 2 description:

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```
revision 1.86
date: 1995/06/07 22:28:56; author: mws; state: Exp; lines: +24 -21
cc/ccrcv.Veqn cc/cc.V cc/cc control blob.pim \
cp/cp.power.tab.top cp/cpl.pim \
euterpe.V (incl UUvldSN128WrtR10 UUvldSN128WrtDR10 name/function change) \
uu/uu.V uu/uu.power.tab.top uu/uu control.pim:
  A cylinder doing an I fill interrupted away so that forward progress became
  active. This allowed another cyl to start a new I miss, which reloaded
  the saved GVA needed to write the original miss's ITag entry. Delays in
  the fill writes navigating through NB+CP allowed the fill adrs to change 1st.
  So change CC to release inprog(p1) not when it sees the last I fill hexlet get
  stuffed into NB (which was arbitrarily modeled upon the same main pipe point
  when the DCache/DTag get written directly on D fills), but instead when CP
  confirms that the ITag write is committed enough to let CC restart.
  Test cachenasty5_var_dr_1 accidentally noticed.
revision 1.85
date: 1995/06/06 02:17:10; author: mws; state: Exp; lines: +9 -4
cc/cclatedirty.Veqn cc/cc.V cc/cc_control_blob.pim:
  On latedirty cases that CC calls "ahd" (store issues at later time than
  instr causing D miss), the start vldStr were correctly pipelined to R16
  and R18 for cclatedirty. Veqn to examine but not the match result which
  was staged to R14 only then used in R16 and R18. This caused matches
  from the cyl number 2 higher for the -2 case and 4 higher for the -4 case
  to be used instead of our own cylinder. Test hermnasty 1 accidentally
  noticed. Fix in cc.V 1.83 was probably never right but just perturbed
  cachesynchnasty2 var a 1 enough to make it pass.
cc/ccrcv. Veqn: Add some comments explaining why CC releases when it does.
  Also note that ccrcv. Vegn 51.7 logmsq should have noted that
  it was making the I inprog release 10 ticks later as it already was in
  the D case to prevent CC from absorbing a new D miss too quickly after
  an I miss finished. The new D miss would retrigger the still piping
  later vldFillR21 causing the fillcount to get out of synch with the rest
  of CC, allowing CC to think it was done 1 hexlet early on later fills
  and clobber registers holding the write data for the 4th hexlet fill.
  Test exintbash var a 1 accidentally noticed.
______
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/cc/cc control blob.pim,v
Working file: verilog/bsrc/cc/cc control blob.pim
head: 77.8
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 8; selected revisions: 2
description:
revision 77.7
date: 1995/06/07 22:28:58; author: mws; state: Exp; lines: +32 -32
cc/ccrcv.Veqn cc/cc.V cc/cc control blob.pim \
cp/cp.power.tab.top cp/cpl.pim \
euterpe.V (incl UUvldSN128WrtR10 UUvldSN128WrtDR10 name/function change) \
uu/uu.V uu/uu.power.tab.top uu/uu control.pim:
  A cylinder doing an I fill interrupted away so that forward progress became
  active. This allowed another cyl to start a new I miss, which reloaded
```

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the saved GVA needed to write the original miss's ITag entry. Delays in

the fill writes navigating through NB+CP allowed the fill adrs to change 1st. So change CC to release inprog(p1) not when it sees the last I fill hexlet get stuffed into NB (which was arbitrarily modeled upon the same main pipe point when the DCache/DTag get written directly on D fills), but instead when CP confirms that the ITag write is committed enough to let CC restart. Test cachenasty5 var dr 1 accidentally noticed.

revision 77.6 date: 1995/06/06 02:17:13; author: mws; state: Exp; lines: +11 -9 cc/cclatedirty. Vegn cc/cc. V cc/cc control blob.pim: On latedirty cases that CC calls "ahd" (store issues at later time than instr causing D miss), the start vldStr were correctly pipelined to R16 and R18 for cclatedirty. Veqn to examine but not the match result which was staged to R14 only then used in R16 and R18. This caused matches from the cyl number 2 higher for the -2 case and 4 higher for the -4 case to be used instead of our own cylinder. Test hermnasty 1 accidentally noticed. Fix in cc.V 1.83 was probably never right but just perturbed cachesynchnasty2_var_a_1 enough to make it pass. cc/ccrcv. Veqn: Add some comments explaining why CC releases when it does. Also note that ccrcv. Veqn 51.7 logmsg should have noted that it was making the I inprog release 10 ticks later as it already was in the D case to prevent CC from absorbing a new D miss too quickly after an I miss finished. The new D miss would retrigger the still piping later vldFillR21 causing the fillcount to get out of synch with the rest of CC, allowing CC to think it was done 1 hexlet early on later fills and clobber registers holding the write data for the 4th hexlet fill. Test exintbash var a 1 accidentally noticed.

```
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/cc/cclatedirty.Veqn,v
Working file: verilog/bsrc/cc/cclatedirty. Vegn
head: 40.9
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 9; selected revisions: 1
description:
revision 40.9
date: 1995/06/06 02:17:14; author: mws; state: Exp; lines: +13 -5
cc/cclatedirty. Veqn cc/cc. V cc/cc control blob.pim:
  On latedirty cases that CC calls "ahd" (store issues at later time than
  instr causing D miss), the start vldStr were correctly pipelined to R16
  and R18 for colatedirty. Vegn to examine but not the match result which
  was staged to R14 only then used in R16 and R18. This caused matches
  from the cyl number 2 higher for the -2 case and 4 higher for the -4 case
  to be used instead of our own cylinder. Test hermnasty 1 accidentally
  noticed. Fix in cc.V 1.83 was probably never right but just perturbed
  cachesynchnasty2 var a 1 enough to make it pass.
cc/ccrcv. Veqn: Add some comments explaining why CC releases when it does.
  Also note that ccrcv. Veqn 51.7 logmsg should have noted that
  it was making the I inprog release 10 ticks later as it already was in
  the D case to prevent CC from absorbing a new D miss too quickly after
  an I miss finished. The new D miss would retrigger the still piping
  later vldFillR21 causing the fillcount to get out of synch with the rest
  of CC, allowing CC to think it was done 1 hexlet early on later fills
```

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and clobber registers holding the write data for the 4th hexlet fill. Test exintbash var a 1 accidentally noticed.

```
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/cc/ccrcv.Veqn,v
Working file: verilog/bsrc/cc/ccrcv. Vegn
head: 51.10
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 10; selected revisions: 3
description:
revision 51.9
date: 1995/06/07 22:29:00; author: mws; state: Exp; lines: +42 -65 cc/ccrcv.
Veqn cc/cc.
V cc/cc_control_blob.pim \
cp/cp.power.tab.top cp/cpl.pim \
euterpe.V (incl UUvldSN128WrtR10 UUvldSN128WrtDR10 name/function change) \
uu/uu.V uu/uu.power.tab.top uu/uu control.pim:
  A cylinder doing an I fill interrupted away so that forward progress became
  active. This allowed another cyl to start a new I miss, which reloaded
  the saved GVA needed to write the original miss's ITag entry. Delays in
  the fill writes navigating through NB+CP allowed the fill adrs to change 1st.
  So change CC to release inprog(p1) not when it sees the last I fill hexlet get
  stuffed into NB (which was arbitrarily modeled upon the same main pipe point
 when the DCache/DTag get written directly on D fills), but instead when CP
  confirms that the ITaq write is committed enough to let CC restart.
  Test cachenasty5 var dr 1 accidentally noticed.
-----
```

revision 51.8

date: 1995/06/06 02:17:16; author: mws; state: Exp; lines: +57 -5 cc/cclatedirty.Veqn cc/cc.V cc/cc control blob.pim:

On latedirty cases that CC calls "ahd" (store issues at later time than instr causing D miss), the start vldStr were correctly pipelined to R16 and R18 for cclatedirty. Vegn to examine but not the match result which was staged to R14 only then used in R16 and R18. This caused matches from the cyl number 2 higher for the -2 case and 4 higher for the -4 case to be used instead of our own cylinder. Test hermnasty_1 accidentally noticed. Fix in cc.V 1.83 was probably never right but just perturbed cachesynchnasty2_var_a_1 enough to make it pass.

cc/ccrcv.Veqn: Add some comments explaining why CC releases when it does. Also note that ccrcv.Veqn 51.7 logmsg should have noted that it was making the I inprog release 10 ticks later as it already was in the D case to prevent CC from absorbing a new D miss too quickly after an I miss finished. The new D miss would retrigger the still piping later vldFillR21 causing the fillcount to get out of synch with the rest of CC, allowing CC to think it was done 1 hexlet early on later fills and clobber registers holding the write data for the 4th hexlet fill. Test exintbash_var_a_1 accidentally noticed.

revision 51.7

date: 1995/06/06 00:19:28; author: billz; state: Exp; lines: +9 -18 I and D states transition from vldFillR21 signal. vldFillR11 is used only in D miss processing to predecode twall (tag write, all bits).

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```
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/cp/BOM,v
Working file: verilog/bsrc/cp/BOM
head: 60.0
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 119; selected revisions: 2
description:
releasebom adding BOM
revision 58.0
date: 1995/06/07 22:31:50; author: mws; state: Exp; lines: +1 -1
Release Target: euterpe/verilog/bsrc
cc/ccrcv.Veqn cc/cc.V cc/cc control blob.pim \
cp/cp.power.tab.top cp/cpl.pim \
euterpe.V (incl UUvldSN128WrtR10 UUvldSN128WrtDR10 name/function change) \
uu/uu.V uu/uu.power.tab.top uu/uu_control.pim:
  A cylinder doing an I fill interrupted away so that forward progress became
  active. This allowed another cyl to start a new I miss, which reloaded
  the saved GVA needed to write the original miss's ITag entry. Delays in
  the fill writes navigating through NB+CP allowed the fill adrs to change 1st.
 So change CC to release inprog(p1) not when it sees the last I fill hexlet get
 stuffed into NB (which was arbitrarily modeled upon the same main pipe point
 when the DCache/DTag get written directly on D fills), but instead when CP
 confirms that the ITag write is committed enough to let CC restart.
 Test cachenasty5 var dr 1 accidentally noticed.
_____
revision 57.1
date: 1995/06/07 22:31:43; author: mws; state: Exp; lines: +3 -3
releasebom: File needs to be up-to-date to use commit -r
______
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/cp/cp.power.tab.top,v
Working file: verilog/bsrc/cp/cp.power.tab.top
head: 19.12
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 12; selected revisions: 1
description:
revision 19.12
date: 1995/06/07 22:28:47; author: mws; state: Exp; lines: +1 -1
cc/ccrcv. Veqn cc/cc. V cc/cc control blob.pim \
cp/cp.power.tab.top cp/cpl.pim \
euterpe.V (incl UUvldSN128WrtR10 UUvldSN128WrtDR10 name/function change) \
uu/uu.V uu/uu.power.tab.top uu/uu control.pim:
 A cylinder doing an I fill interrupted away so that forward progress became
 active. This allowed another cyl to start a new I miss, which reloaded
  the saved GVA needed to write the original miss's ITag entry. Delays in
 the fill writes navigating through NB+CP allowed the fill adrs to change 1st.
  So change CC to release inprog(p1) not when it sees the last I fill hexlet get
  stuffed into NB (which was arbitrarily modeled upon the same main pipe point
 when the DCache/DTag get written directly on D fills), but instead when CP
```

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confirms that the ITag write is committed enough to let CC restart. Test cachenasty5_var_dr_1 accidentally noticed. ______ RCS file: /s6/cvsroot/euterpe/verilog/bsrc/cp/cpl.pim,v Working file: verilog/bsrc/cp/cpl.pim head: 41.7 branch: locks: strict access list: keyword substitution: kv total revisions: 7; selected revisions: 1 description: revision 41.6 date: 1995/06/07 22:28:49; author: mws; state: Exp; lines: +1 -1 cc/ccrcv.Veqn cc/cc.V cc/cc control blob.pim \ cp/cp.power.tab.top cp/cpl.pim \ euterpe.V (incl UUvldSN128WrtR10 UUvldSN128WrtDR10 name/function change) \ uu/uu.V uu/uu.power.tab.top uu/uu control.pim: A cylinder doing an I fill interrupted away so that forward progress became active. This allowed another cyl to start a new I miss, which reloaded the saved GVA needed to write the original miss's ITag entry. Delays in the fill writes navigating through NB+CP allowed the fill adrs to change 1st. So change CC to release inprog(p1) not when it sees the last I fill hexlet get stuffed into NB (which was arbitrarily modeled upon the same main pipe point when the DCache/DTag get written directly on D fills), but instead when CP confirms that the ITaq write is committed enough to let CC restart. Test cachenasty5 var dr 1 accidentally noticed. RCS file: /s6/cvsroot/euterpe/verilog/bsrc/gt/BOM,v Working file: verilog/bsrc/gt/BOM head: 98.0 branch: locks: strict access list: keyword substitution: kv total revisions: 194; selected revisions: 2 description: releasebom adding BOM revision 96.0 date: 1995/06/03 14:49:03; author: woody; state: Exp; lines: +1 -1 Release Target: euterpe/verilog/bsrc Changes to euterpe. V and gt. V to accomadate for the 2 added vref signals to the gtlb. gt placement updated. The 2 vref generators are placed in the row immed below the gtlb with one on each side of the clockspar in the middle of the gtlb. Requires proteus/ged/gt/BOM 10.0 and proteus/verilog/src/gt/BOM 8.0 to run verilog. 5woody 0 fabbed with both the behavioral model and the real gtlb.

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revision 95.1

```
date: 1995/06/03 14:48:56; author: woody; state: Exp; lines: +5 -5
releasebom: File needs to be up-to-date to use commit -r
______
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/qt/Makefile,v
Working file: verilog/bsrc/gt/Makefile
head: 1.29
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 29; selected revisions: 1
description:
revision 1.29
date: 1995/06/03 14:45:38; author: woody; state: Exp; lines: +2 -2
Changes to euterpe.V and gt.V to accomadate for the 2 added vref signals to the
gtlb. gt placement updated. The 2 vref generators are placed in the row immed
below the gtlb with one on each side of the clockspar in the middle of the
qtlb.
Requires proteus/ged/gt/BOM 10.0 and proteus/verilog/src/gt/BOM 8.0 to run
verilog.
5woody 0 fabbed with both the behavioral model and the real qtlb.
______
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/qt/clean-request,v
Working file: verilog/bsrc/gt/clean-request
head: 41.8
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 8; selected revisions: 1
description:
_____
revision 41.8
date: 1995/06/03 14:45:40; author: woody; state: Exp; lines: +2 -1
Changes to euterpe.V and gt.V to accomadate for the 2 added vref signals to the
gtlb. gt placement updated. The 2 vref generators are placed in the row immed
below the gtlb with one on each side of the clockspar in the middle of the
gtlb.
Requires proteus/ged/gt/BOM 10.0 and proteus/verilog/src/gt/BOM 8.0 to run
verilog.
5woody 0 fabbed with both the behavioral model and the real qtlb.
______
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/gt/gt.V,v
Working file: verilog/bsrc/gt/gt.V
head: 2.28
branch:
locks: strict
access list:
keyword substitution: kv
```

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```
total revisions: 28; selected revisions: 1
description:
revision 2.27
date: 1995/06/03 14:45:42; author: woody; state: Exp; lines: +9 -2
Changes to euterpe.V and gt.V to accomadate for the 2 added vref signals to the
qtlb. qt placement updated. The 2 vref generators are placed in the row immed
below the gtlb with one on each side of the clockspar in the middle of the
gtlb.
Requires proteus/ged/gt/BOM 10.0 and proteus/verilog/src/gt/BOM 8.0 to run
verilog.
5woody 0 fabbed with both the behavioral model and the real gtlb.
______
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/gt/pimlib.pl,v
Working file: verilog/bsrc/gt/pimlib.pl
head: 26.23
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 23; selected revisions: 1
description:
_____
revision 26,23
date: 1995/06/03 14:45:44; author: woody; state: Exp; lines: +13 -1
Changes to euterpe. V and gt.V to accomadate for the 2 added vref signals to the
gtlb. gt placement updated. The 2 vref generators are placed in the row immed
below the gtlb with one on each side of the clockspar in the middle of the
gtlb.
Requires proteus/ged/gt/BOM 10.0 and proteus/verilog/src/gt/BOM 8.0 to run
verilog.
5woody 0 fabbed with both the behavioral model and the real qtlb.
______
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/hc/BOM,v
Working file: verilog/bsrc/hc/BOM
head: 125.0
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 250; selected revisions: 2
description:
releasebom adding BOM
revision 110.0
date: 1995/06/07 22:34:23; author: mws; state: Exp; lines: +1 -1
Release Target: euterpe/verilog/bsrc
cc/ccrcv.Veqn cc/cc.V cc/cc control blob.pim \
cp/cp.power.tab.top cp/cpl.pim \
euterpe.V (incl UUvldSN128WrtR10 UUvldSN128WrtDR10 name/function change) \
```

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```
uu/uu.V uu/uu.power.tab.top uu/uu control.pim:
 A cylinder doing an I fill interrupted away so that forward progress became
  active. This allowed another cyl to start a new I miss, which reloaded
  the saved GVA needed to write the original miss's ITag entry. Delays in
  the fill writes navigating through NB+CP allowed the fill adrs to change 1st.
 So change CC to release inprog(p1) not when it sees the last I fill hexlet get
 stuffed into NB (which was arbitrarily modeled upon the same main pipe point
 when the DCache/DTaq get written directly on D fills), but instead when CP
 confirms that the ITag write is committed enough to let CC restart.
 Test cachenasty5 var dr 1 accidentally noticed.
revision 109.1
date: 1995/06/06 18:01:36; author: woody; state: Exp; lines: +2 -2
Release Target: euterpe/verilog/bsrc/hc
     hc0 control.pim
Move usnapc2/u0 to avoid a toplevel collision
______
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/hc/hc0 control.pim,v
Working file: verilog/bsrc/hc/hc0 control.pim
head: 73.25
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 25; selected revisions: 1
description:
_____
revision 73.17
date: 1995/06/06 18:01:08; author: woody; state: Exp; lines: +3 -1
Move usnapc2/u0 to avoid a toplevel collision
______
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/uu/BOM,v
Working file: verilog/bsrc/uu/BOM
head: 218.1
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 480; selected revisions: 2
description:
revision 203.0
date: 1995/06/07 22:38:30; author: mws; state: Exp; lines: +1 -1
Release Target: euterpe/verilog/bsrc
cc/ccrcv.Veqn cc/cc.V cc/cc control blob.pim \
cp/cp.power.tab.top cp/cpl.pim \
euterpe.V (incl UUvldSN128WrtR10 UUvldSN128WrtDR10 name/function change) \
uu/uu.V uu/uu.power.tab.top uu/uu control.pim:
 A cylinder doing an I fill interrupted away so that forward progress became
 active. This allowed another cyl to start a new I miss, which reloaded
  the saved GVA needed to write the original miss's ITag entry. Delays in
  the fill writes navigating through NB+CP allowed the fill adrs to change 1st.
  So change CC to release inprog(p1) not when it sees the last I fill hexlet get
```

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stuffed into NB (which was arbitrarily modeled upon the same main pipe point when the DCache/DTag get written directly on D fills), but instead when CP confirms that the ITag write is committed enough to let CC restart. Test cachenasty5 var dr 1 accidentally noticed. ----revision 202.1 date: 1995/06/07 22:38:18; author: mws; state: Exp; lines: +4 -4 releasebom: File needs to be up-to-date to use commit -r ______ RCS file: /s6/cvsroot/euterpe/verilog/bsrc/uu/uu.V,v Working file: verilog/bsrc/uu/uu.V head: 1.202 branch: locks: strict access list: keyword substitution: kv total revisions: 202; selected revisions: 1 description: issue unit ----revision 1.191 date: 1995/06/07 22:29:35; author: mws; state: Exp; lines: +6 -6 cc/ccrcv.Veqn cc/cc.V cc/cc control blob.pim \ cp/cp.power.tab.top cp/cpl.pim \ euterpe.V (incl UUvldSN128WrtR10 UUvldSN128WrtDR10 name/function change) \ uu/uu.V uu/uu.power.tab.top uu/uu control.pim: A cylinder doing an I fill interrupted away so that forward progress became active. This allowed another cyl to start a new I miss, which reloaded the saved GVA needed to write the original miss's ITag entry. Delays in the fill writes navigating through NB+CP allowed the fill adrs to change 1st. So change CC to release inprog(p1) not when it sees the last I fill hexlet get stuffed into NB (which was arbitrarily modeled upon the same main pipe point when the DCache/DTag get written directly on D fills), but instead when CP confirms that the ITag write is committed enough to let CC restart. Test cachenasty5 var dr 1 accidentally noticed. ______ RCS file: /s6/cvsroot/euterpe/verilog/bsrc/uu/uu.power.tab.top.v Working file: verilog/bsrc/uu/uu.power.tab.top head: 119.13 branch: locks: strict access list: keyword substitution: kv total revisions: 13; selected revisions: 1 description: revision 119.13 date: 1995/06/07 22:29:45; author: mws; state: Exp; lines: +3 -3 cc/ccrcv.Veqn cc/cc.V cc/cc control blob.pim \ cp/cp.power.tab.top cp/cpl.pim \

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euterpe.V (incl UUvldSN128WrtR10 UUvldSN128WrtDR10 name/function change) \

A cylinder doing an I fill interrupted away so that forward progress became active. This allowed another cyl to start a new I miss, which reloaded the saved GVA needed to write the original miss's ITag entry. Delays in

uu/uu.V uu/uu.power.tab.top uu/uu control.pim:

the fill writes navigating through NB+CP allowed the fill adrs to change 1st. So change CC to release inprog(p1) not when it sees the last I fill hexlet get stuffed into NB (which was arbitrarily modeled upon the same main pipe point when the DCache/DTag get written directly on D fills), but instead when CP confirms that the ITag write is committed enough to let CC restart. Test cachenasty5 var dr 1 accidentally noticed.

```
RCS file: /s6/cvsroot/euterpe/verilog/bsrc/uu/uu control.pim,v
Working file: verilog/bsrc/uu/uu control.pim
head: 68.60
branch:
locks: strict
access list:
keyword substitution: kv
total revisions: 60; selected revisions: 1
description:
_____
revision 68.56
date: 1995/06/07 22:30:07; author: mws; state: Exp; lines: +1 -1
cc/ccrcv.Veqn cc/cc.V cc/cc control blob.pim \
cp/cp.power.tab.top cp/cpl.pim \
euterpe.V (incl UUvldSN128WrtR10 UUvldSN128WrtDR10 name/function change) \
uu/uu.V uu/uu.power.tab.top uu/uu_control.pim:
 A cylinder doing an I fill interrupted away so that forward progress became
 active. This allowed another cyl to start a new I miss, which reloaded
 the saved GVA needed to write the original miss's ITag entry. Delays in
 the fill writes navigating through NB+CP allowed the fill adrs to change 1st.
 So change CC to release inprog(p1) not when it sees the last I fill hexlet get
 stuffed into NB (which was arbitrarily modeled upon the same main pipe point
 when the DCache/DTag get written directly on D fills), but instead when CP
 confirms that the ITag write is committed enough to let CC restart.
 Test cachenasty5 var dr 1 accidentally noticed.
______
```

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